

The listing of claims presented below replaces all prior versions and listing of claims in the application.

Listing of claims:

1. (Currently amended) An automated method for controlling environmental parameters in a defined environment, said method comprising the steps of:

measuring values of temperature, relative humidity, and wind velocity in said environment;

calculating values of perceived temperature as a function of said measured values of temperature, relative humidity, and wind velocity, assuming a specified relative humidity , ~~converting values of temperature measured at corresponding values of relative humidity to values of perceived temperature at a constant reference value of relative humidity; and~~

controlling said environmental parameters based on said values of perceived temperature.

2. (Previously Presented) The method of claim 1, wherein said defined environment comprises a chicken house and said perceived temperature is representative of a temperature perceived by chickens in said chicken house.

3. (Previously Presented) The method of claim 2, wherein said perceived temperature is a function of a characteristic of said chickens.

4. (Canceled) .

5. (Previously Presented) The method of claim 2, comprising the further steps of:

calculating an optimum perceived temperature based on a characteristic of said chickens; and

calculating hot and cold stress limits for said chickens based on said optimum perceived temperature, wherein said hot and cold stress limits correspond to temperature values above and below said optimal perceived temperature, respectively.

6. (currently amended) The method of claim 5, comprising the further step of calculating stress levels experienced by said chickens as a function of said stress limits and said ~~sate~~ perceived temperature.

7. (Previously Presented) The method of claim 6, comprising the further step of calculating a value of accumulated stress of said chickens during a production cycle.

8. (Previously presented) The method of claim 3, wherein said characteristic is selected from the group of characteristics consisting of:

age of said chickens; and

weight of said chickens.

9. (Previously Presented) The method of claim 1, wherein said perceived temperature comprises a temperature perceived by a living being in said defined environment, said living

being selected from the group of living beings:

human beings;

animals;

plants;

crops;

pigs; and

poultry.

10. (Currently amended) An apparatus for controlling environmental parameters in a defined environment, said apparatus comprising:

a memory unit for storing data and instructions to be performed by a processing unit; and

the processing unit coupled to said memory unit, said processing unit programmed to:

obtain measured values of temperature, relative humidity, and wind velocity relating to said environment;

calculate values of perceived temperature as a function of said measured values of temperature, relative humidity, and wind velocity, assuming a specified relative humidity; convert values of temperature measured at corresponding values of relative humidity to values of perceived temperature at a constant reference value of relative humidity; and

provide said values of perceived temperature for controlling said environmental parameters.

11. (Previously Presented) The apparatus of claim 10, further comprising an interface for providing said values of perceived temperature to an environmental controller.

12. (Previously Presented) The apparatus of claim 10, further comprising a controller for controlling said environmental parameters in response to said values of perceived temperature.

13. (Previously Presented) The apparatus of claim 10, wherein said defined environment comprises a chicken house and said perceived temperature is representative of a temperature perceived by chickens in said chicken house.

14. (Previously Presented) The apparatus of claim 13, wherein said processing unit is further programmed to calculate said perceived temperature as a function of a characteristic of said chickens.

15. (Canceled) .

16. (Previously Presented) The apparatus of claim 13, wherein said processing unit is further programmed to:

calculate an optimum perceived temperature based on a characteristic of said chickens; and

calculate hot and cold stress limits for said chickens based on said optimum perceived temperature, wherein said hot and cold stress limits correspond to

temperature values above and below said optimal perceived temperature, respectively.

17. (Previously Presented) The apparatus of claim 16, wherein said processing unit is further programmed to calculate stress levels experienced by said chickens as a function of said stress limits and said perceived temperature.

18. (Previously Presented) The apparatus of claim 17, wherein said processing unit is further programmed to calculate a value of accumulated stress of said chickens during a production cycle.

19. (Previously presented) The apparatus of claim 14, wherein said characteristic is selected from the group of characteristics consisting of:

age of said chickens; and

weight of said chickens.

20. (Canceled)

21. (Previously Presented) The apparatus of claim 10, wherein said perceived temperature comprises a temperature perceived by a living being in said defined environment, said living being selected from the group of living beings:

human beings;

animals;

plants;
crops;
pigs; and
poultry.

22. -31 (Canceled)

32. (Previously Presented) The method of claim 1, comprising the further step of determining wind chill based on said measured values of temperature and wind velocity, and wherein said perceived temperature is calculated as a function of said wind chill-compensated value of said measured temperature.

33. (Canceled)

34. (Previously Presented) The apparatus of claim 10, wherein said processing unit is programmed to determine wind chill based on said measured values of temperature and wind velocity, and calculate said perceived temperature as a function of said wind chill-compensated value of said measured temperature.

35. -37 (Canceled)

38. (Previously Presented) An automated method for controlling environmental parameters in a chicken house, said method comprising the steps of:

measuring values of temperature, relative humidity, and wind velocity in said chicken house;

determining wind chill as a function of said measured values of temperature and wind velocity, and at least one characteristic of chickens in said chicken house;

determining values of perceived temperature at a constant reference value of relative humidity as a function of corresponding wind chill-compensated values of temperature measured at corresponding values of relative humidity and at least one characteristic of chickens in said chicken house; and

controlling said environmental parameters based on said values of perceived temperature.

39. (Canceled)

40. (Previously Presented) An apparatus for controlling environmental parameters in a chicken house, said apparatus comprising:

a memory unit for storing data and instructions to be performed by a processing unit; and

[[a]] the processing unit coupled to said memory unit, said processing unit programmed to:

obtain measured values of temperature, relative humidity, and wind velocity in said chicken house;

determine wind chill as a function of said measured

values of temperature and wind velocity, and at least one characteristic of chickens in said chicken house;

determine values of perceived temperature at a constant reference value of relative humidity as a function of corresponding wind chill-compensated values of temperature measured at corresponding values of relative humidity and at least one characteristic of chickens in said chicken house; and

control said environmental parameters based on said values of perceived temperature.

41 - 43. (Canceled)

44 (new) The method of claim 1, wherein the assumed relative humidity is 50%.